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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,741	04/24/2006	Samuel J. Shuster	14848-010US1	3556

26191 7590 08/06/2008

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EXAMINER	
CHONG, KIMBERLY	
ART UNIT	PAPER NUMBER
1635	
MAIL DATE	DELIVERY MODE
08/06/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/537,741	SHUSTER ET AL.	
	Examiner	Art Unit	
	KIMBERLY CHONG	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *9-11,13,14 and 18-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8, 12 and 15-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/30/06,11/27/06,4/21/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-8, 12 and 15-17 in the reply filed on 03/24/2008 is acknowledged. The traversal is on the ground(s) that the antisense oligonucleotides meet the criteria of (B)(2) because all the antisense sequences belong to the same art recognized class of compounds and each member can be substituted one for the other with the expectation that the same intended result would be achieved, i.e. inhibitions of the production of TRPM2. This is not found persuasive because the antisense compounds do not have a common property or activity *and* a common structure. Each of the antisense compounds each has a different nucleic acid sequence and do not share a common core structure. Thus, unity of invention is lacking.

The requirement is still deemed proper and is therefore made FINAL.

Status of the Application

Claims 1-28 are pending. Claims 1-8, 12 and 15-17 are currently under examination. Claims 9-11, 13, 14 and 18-28 and non-elected subject matter are withdrawn as being drawn to a non-elected invention.

Oath/Declaration

The oath or declaration filed 04/24/2006 is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

> The oath or declaration is defective because:
> Non-initialed and/or non-dated alterations have been made to the oath or declaration. Specifically, alterations were made for the citizenship of inventor Lucy Vulchanova Hart that was not initialed. See 37 CFR 1.52(c).

Information Disclosure Statement

The information disclosure statements (IDS) filed 03/30/2006 and 11/27/2006 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. The IDS filed 03/30/2006 fails to comply because the foreign patent document labeled AM has not been translated and therefore only the English abstract will be considered. The IDS filed 11/27/2006 fails to comply because the foreign patent document having number PCT/SE01/02054 has not been made of record and appears to not have been filed. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lima et al. (US Patent No. 5,582,972).

Claims 1, 2 and 4-8 are drawn to an isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region, said region being defined by nucleotides 2821-2838 of SEQ ID No. 1 and inhibits the production of TRPM2, wherein said oligonucleotide comprises internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases and further drawn to a composition comprising said antisense oligonucleotide

Lima et al. teach an antisense compound that is 10 nucleotides in length and wherein the antisense compound hybridizes to a region defined by nucleotides 2821-2838 of SEQ ID No. 1 (disclosed as SEQ ID No. 2, see sequence alignment below). Lima et al. teach the antisense compounds can comprise internucleoside linkages, oligonucleotide analogs such as PNA, substituted sugar moieties or modified bases (see columns 6 and 7). Lima et al. are silent regarding whether the antisense compound inhibits the production of TRPM2. However, the burden of establishing whether the teachings disclosed by Lima et al. would have the additional function of inhibiting the

production of TRPM2 falls to Applicant. See MPEP 2112.01, "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 562 F.2d at 1255, 195 USPQ at 433."

See also MPEP 2112: "[T]he PTO can require an Applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [her] claimed product." The MPEP at 2112 citing *In re Fitzgerald* 205 USPQ 594. 596, (CCPA 1980), quoting In re Best 195 USPQ 430 as per above. Therefore, it falls to Applicant to determine and provide evidence that the antisense oligonucleotide disclosed by Lima et al. would not inhibit the production of TRPM2 as instantly claimed.

Therefore, absent evidence to the contrary, Lima et al. anticipates claims 1, 2 and 4-8.

Claims 1, 2 and 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Hardee et al. (US Patent No. 6,083,923).

Claims 1, 2 and 4-8 are drawn to an isolated antisense oligonucleotide consisting

essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region, said region being defined by nucleotides 2821-2838 of SEQ ID No. 1 and inhibits the production of TRPM2, wherein said oligonucleotide comprises internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases and further drawn to a composition comprising said antisense oligonucleotide

Hardee et al. teach an antisense compound that is 10 nucleotides in length and wherein the antisense compound hybridizes to a region defined nucleotides 2821-2838 of SEQ ID No. 1 (disclosed as SEQ ID No. 10, see sequence alignment below). Hardee et al. teach the antisense compounds can comprise internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases (see columns 7 and 8). Hardee et al. teach pharmaceutical composition comprising said oligonucleotide (see columns 13 and 14). Hardee et al. are silent regarding whether the antisense compound inhibits the production of TRPM2. However, the burden of establishing whether the teachings disclosed by Hardee et al. would have the additional function of inhibiting the production of TRPM2 falls to Applicant. See MPEP 2112.01, "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709,

15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best, 562 F.2d at 1255, 195 USPQ at 433."

See also MPEP 2112: "[T]he PTO can require an Applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [her] claimed product." The MPEP at 2112 citing *In re Fitzgerald* 205 USPQ 594. 596, (CCPA 1980), quoting In re Best 195 USPQ 430 as per above. Therefore, it falls to Applicant to determine and provide evidence that the antisense oligonucleotide disclosed by Lima et al. would not inhibit the production of TRPM2 as instantly claimed.

Therefore, absent evidence to the contrary, Hardee et al. anticipates claims 1, 2 and 4-8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyake et al. (Cancer Research 2000, Vol. 60: 170-176) and Liang et al. (W0224950 cited as PCT SE01-02054 on Applicant's IDS) and Russell et al. (US Patent No. 6,440,732).

Claims 1, 2 and 4-8 are drawn to an isolated antisense oligonucleotide consisting

essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region, said region being defined by nucleotides 2821-2838 of SEQ ID No. 1 and inhibits the production of TRPM2, wherein said oligonucleotide comprises internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases and further drawn to a composition comprising said antisense oligonucleotide and an isolated antisense compound consisting essentially of SEQ ID No. 6.

Miyake et al. teach TRPM2 is an apoptosis-related gene and is involved in the progression of prostate cancer (see Abstract and page 170). Miyake et al. teach inhibition of TRPM2 by antisense oligonucleotides may enhance apoptosis and delay the progression of prostate cancer (see page 175, column 1). Miyake et al. do not teach identification of accessible regions to target on a TRPM2 RNA and do not teach nucleic acid constructs, oligonucleotide modifications or compositions comprising a plurality of antisense oligonucleotides.

Liang et al. teach a method for identifying any accessible region on a native RNA molecule (see pages 5 and 8). Liang et al. teach methods of identifying and selecting oligonucleotide molecules that bind to the test mRNA accessible sites, wherein the sequence of the oligonucleotide will correspond to the accessible region of the RNA sequence (see page 5, especially lines 27-30 and page 8). Liang et al. teach said antisense compounds may be modified to increase its resistance to endogenous nucleases wherein such modifications included internucleoside linkages (see page 13) and teach pharmaceutical compositions (see page 15). Liang et al. teach using a library

of random oligonucleotides to bind to regions of an RNA and teach identifying multiple antisense compounds that are capable of binding to different accessible regions of a target RNA sequences and teach such antisense compounds had greater activity than empirically selected oligonucleotides (see page 21).

Russell et al. teach nucleic acid constructs comprising a promoter linked to a sequence that is capable of expressing an antisense oligonucleotide (see columns 14 and 15). Russell et al. teach compositions comprising antisense oligonucleotides and teach cells comprising said constructs (see column 20) and teach nucleic acid sequences can comprise internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases (see column15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method taught by Liang et al. to identify accessible regions of a TRPM2 RNA and make any antisense oligonucleotide that hybridized to an accessible region of a TRPM2 RNA.

One of ordinary skill in the art would have wanted to find the accessible regions on a TRPM2 RNA to generate antisense compounds to inhibit the expression of TRPM2 to further elucidate the role TRPM2 plays in prostate cancer. Antisense technology is one of the most useful tools in therapeutic applications and one would have wanted to find the most effective antisense compound that is capable of hybridizing to a TRPM2 RNA and given Liang et al. teach method that efficiently identifies such regions, one of skill in the art would have wanted to use the method taught by Liang et al. Because Liang et al. teach identification of multiple antisense compounds that target different

accessible regions of a RNA, one of ordinary skill would have wanted to use a composition comprising multiple antisense compounds to more efficiently inhibit expression of a target gene, such as TRPM2. One of ordinary skill in the art would have wanted to deliver antisense compounds to cells more efficiently by using nucleic acid constructs that are capable of expressing antisense compounds as taught by Russell et al.

There would have been a reasonable expectation of success at identifying accessible regions on a TRPM2 RNA and making antisense oligonucleotides that efficiently target said regions and reduce expression of a TRPM2 target RNA because Liang et al. teach the necessary steps to identify virtually any accessible region of a target RNA.

Thus in the absence of evidence to the contrary, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Claims 1-8, 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleave et al. (US Patent No. 6,900,187) and Liang et al. (W0224950) and Russell et al. (US Patent No. 6,440,732).

Claims 1, 2 and 4-8 are drawn to an isolated antisense oligonucleotide consisting essentially of 10 to 50 nucleotides, wherein said oligonucleotide specifically hybridizes within an accessible region, said region being defined by nucleotides 2821-2838 of SEQ ID No. 1 and inhibits the production of TRPM2, wherein said oligonucleotide comprises

internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases and further drawn to a composition comprising said antisense oligonucleotide and an isolated antisense compound consisting essentially of SEQ ID No. 6.

Gleave et al. teach TRPM2 is expressed in prostate tumor cells (see columns 1 and 2). Gleave et al. teach inhibition of TRPM2 by antisense oligonucleotides reduces the onset of androgen dependence and induces apoptosis in prostate tumor cells (see columns 1 and 2). Gleave et al. teach antisense oligonucleotides targeted to TRPM2 can be complementary to any region of the mRNA including the translation initiation or termination site but found only 3 antisense compounds that had activity (see Example 5). Gleave et al. do not teach identification of accessible regions, such as nucleotides 2821-2838, to target on a TRPM2 RNA and do not teach nucleic acid constructs, oligonucleotide modifications or compositions comprising a plurality of antisense oligonucleotides.

Liang et al. teach a method for identifying any accessible region on a native RNA molecule (see pages 5 and 8). Liang et al. teach methods of identifying and selecting oligonucleotide molecules that bind to the test mRNA accessible sites, wherein the sequence of the oligonucleotide will correspond to the accessible region of the RNA sequence (see page 5, especially lines 27-30 and page 8). Liang et al. teach said antisense compounds may be modified to increase its resistance to endogenous nucleases wherein such modifications included internucleoside linkages (see page 13) and teach pharmaceutical compositions (see page 15). Liang et al. teach using a library

of random oligonucleotides to bind to regions of an RNA and teach identifying multiple antisense compounds that are capable of binding to different accessible regions of a target RNA sequences and teach such antisense compounds had greater activity than empirically selected oligonucleotides (see page 21).

Russell et al. teach nucleic acid constructs comprising a promoter linked to a sequence that is capable of expressing an antisense oligonucleotide (see columns 14 and 15). Russell et al. teach compositions comprising antisense oligonucleotides and teach cells comprising said constructs (see column 20) and teach nucleic acid sequences can comprise internucleoside linkages, oligonucleotide analogs, substituted sugar moieties or modified bases (see column15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method taught by Liang et al. to identify accessible regions of a TRPM2 RNA and make any antisense oligonucleotide that hybridized to an accessible region of a TRPM2 RNA.

One of ordinary skill in the art would have wanted to find the accessible regions on a TRPM2 RNA to generate antisense compounds to inhibit the expression of TRPM2 to further elucidate the role TRPM2 plays in prostate cancer. One of ordinary skill in the art would have wanted to use the methods taught by Liang et al. given Gleave et al. teach that out of 10 antisense compounds identified, only 3 had the ability to reduce the production of TRPM2 in cells. Because antisense technology is one of the most useful tools in therapeutic applications and Gleave et al. teach the importance of reducing expression of TRPM2 in the treatment of prostate cancer, one would have wanted to be

able to identify the most effective antisense compound that is capable of hybridizing to a TRPM2 RNA and given Liang et al. teach method that efficiently identifies such regions, one of skill in the art would have wanted to use the method taught by Liang et al. Because Liang et al. teach identification of multiple antisense compounds that target different accessible regions of a RNA, one of ordinary skill would have wanted to use a composition comprising multiple antisense compounds to more efficiently inhibit expression of a target gene, such as TRPM2. One of ordinary skill in the art would have wanted to deliver antisense compounds to cells more efficiently by using nucleic acid constructs that are capable of expressing antisense compounds as taught by Russell et al.

There would have been a reasonable expectation of success at identifying accessible regions on a TRPM2 RNA and making antisense oligonucleotides that efficiently target said regions and reduce expression of a TRPM2 target RNA because Liang et al. teach the necessary steps to identify virtually any accessible region of a target RNA.

Thus in the absence of evidence to the contrary, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Sequence Alignment Results

```
RESULT 7
US-07-990-303A-2/c
; Sequence 2, Application US/07990303A
; Patent No. 5582972
;  GENERAL INFORMATION:
;    APPLICANT:  Lima, Walter F.
;    APPLICANT:  Monia, Brett P.
;    APPLICANT:  Freier, Susan M.
```

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;    APPLICANT:  Ecker, David J.
;    TITLE OF INVENTION:  ANTISENSE OLIGONUCLEOTIDES
;    TITLE OF INVENTION:  TO THE ras GENE
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Woodcock Washburn Kurtz
;      ADDRESSEE:  Mackiewicz & No. 5582972ris
;      STREET:  One Liberty Place - 46th Floor
;      CITY:  Philadelphia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19103
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM PS/2
;      OPERATING SYSTEM:  PC-DOS
;      SOFTWARE:  WORDPERFECT 5.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/990,303A
;      FILING DATE:  19921214
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  715,196
;      FILING DATE:  June 14, 1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jane Massey Licata
;      REGISTRATION NUMBER:  32,257
;      REFERENCE/DOCKET NUMBER:  ISIS-0786
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 568-3100
;      TELEFAX:  (215) 568-3439
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10
;      TYPE:  NUCLEIC ACID
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    ANTI-SENSE:  YES
US-07-990-303A-2

  Query Match             44.4%;  Score 8;  DB 2;  Length 10;
  Score over Length       80.0%;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+06;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps
0;

Qy         11 GTGGTGGT 18
              ||||||||
Db          9 GTGGTGGT 2
```

```
RESULT 15
US-08-961-469A-20/c
; Sequence 20, Application US/08961469A
; Patent No. 6083923
;  GENERAL INFORMATION:
;    APPLICANT:  Greg Hardee, Richard Geary, Arthur Levin,
;    APPLICANT:  Mike Templin, Randy Howard, Rahul Mehta
;    TITLE OF INVENTION:  LIPOSOMAL OLIGONUCLEOTIDE COMPOSITIONS
FOR MO
;    NUMBER OF SEQUENCES:  61
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Jane Massey Licata, Esq.
;      STREET:  66 E. Main Street
;      CITY:  Marlton
;      STATE:  NJ
;      COUNTRY:  USA
;      ZIP:  08053
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  PENTIUM
;      OPERATING SYSTEM:  WINDOWS 95
;      SOFTWARE:  WORDPERFECT 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/961,469A
;      FILING DATE:  October 31, 1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jane Massey Licata
;      REGISTRATION NUMBER:  32,257
;      REFERENCE/DOCKET NUMBER:  ISPH-0219
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  609-779-2400
;      TELEFAX:  609-810-1454
;  INFORMATION FOR SEQ ID NO:  20:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  10
;      TYPE:  nucleic acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  YES
US-08-961-469A-20

  Query Match             44.4%;  Score 8;  DB 3;  Length 10;
  Score over Length       80.0%;
  Best Local Similarity   100.0%;  Pred. No. 2.7e+06;
  Matches    8;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps
0;

Qy          11 GTGGTGGT 18
               ||||||||
Db           9 GTGGTGGT 2
```

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Chong whose telephone number is 571-272-3111. The examiner can normally be reached Monday thru Friday between 7-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Doug) Schultz can be reached at 571-272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For more information about the PAIR system, see http://pair-direct.uspto.gov.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

/Kimberly Chong/
Examiner
Art Unit 1635